

Curriculum Mapping for South Dakota Essential Core Standards

Grade 11 Math - Number Sense

Includes core standards from grades 9-10

X = Not taught
I = Introduced
R = Reinforced
P = Proficient/practiced

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems.			
Standard	Curriculum Map (X, I, R, P)	Resources	Actions Needed
1. (9) apply properties and axioms of the real number system to various subsets, e.g. axioms of order			
2. (10) understand that real numbers can be represented in a variety of forms, e.g. integers, fractions, decimals, percents, scientific notation, exponents, radicals, absolute value.			
Indicator 2: Apply number operations with real numbers and other number systems.			
Standard	Curriculum Map (X, I, R, P)	Resources	Actions Needed
1. (9) evaluate algebraic expressions.			
2. (10) add, subtract, multiply, and divide real numbers including roots and exponents using appropriate computational strategies, e.g. mental mathematics, paper and pencil, calculator			

Grade 11 Math - Number Sense continued:

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.			
Standard	Curriculum Map (X, I, R, P)	Resources	Actions Needed
1. (9) use estimation strategies in complex situations to predict results and to check the reasonableness of results.			
2. (10) select and justify alternative strategies, e.g., use properties of numbers that allow operational shortcuts for computational procedures			
Indicator 4: Analyze the concept of value, magnitude, and relative magnitude of real numbers.			
Standard	Curriculum Map (X, I, R, P)	Resources	Actions Needed
1. (9) understand the relative size of sets of rational numbers and irrational numbers.			
2. (10) apply operations to numbers expressed in scientific notation.			